

ETSI TS 101 376-1-1 V2.1.1 (2005-03)

Technical Specification

**GEO-Mobile Radio Interface Specifications (Release 2)
General Packet Radio Service;
Part 1: General specifications;
Sub-part 1: Abbreviations and acronyms;
GMPRS-1 01.004**



Reference

RTS/SES-00235-1-1

Keywords

GMPRS, GMR, MSS, mobile, earth station, MES, satellite, GSO, S-PCN, GSM, radio

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Contents

| | |
|---------------------------------------|----|
| Intellectual Property Rights | 4 |
| Foreword..... | 4 |
| Introduction | 5 |
| 1 Scope | 6 |
| 2 References | 6 |
| 3 Abbreviations and acronyms | 6 |
| History | 21 |

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Satellite Earth Stations and Systems (SES).

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The present document is part 1, sub-part 1 of a multi-part deliverable covering the GEO-Mobile Radio Interface Specifications (Release 2) General Packet Radio Service, as identified below:

Part 1: "General specifications":

Sub-part 1: "Abbreviations and acronyms";

 Sub-part 2: "Introduction to the GMR-1 family";

 Sub-part 3: "General System Description";

Part 2: "Service specifications";

Part 3: "Network specifications";

Part 4: "Radio interface protocol specifications";

Part 5: "Radio interface physical layer specifications";

Part 6: "Speech coding specifications";

Part 7: "Terminal adaptor specifications".

Introduction

GMR stands for GEO (Geostationary Earth Orbit) Mobile Radio interface, which is used for mobile satellite services (MSS) utilizing geostationary satellite(s). GMR is derived from the terrestrial digital cellular standard GSM and supports access to GSM core networks.

The present document is part of the GMR Release 2 specifications. Release 2 specifications are identified in the title and can also be identified by the version number:

- Release 1 specifications have a GMR-1 prefix in the title and a version number starting with "1" (V1.x.x.).
- Release 2 specifications have a GMPRS-1 prefix in the title and a version number starting with "2" (V2.x.x.).

The GMR release 1 specifications introduce the GEO-Mobile Radio interface specifications for circuit mode mobile satellite services (MSS) utilizing geostationary satellite(s). GMR release 1 is derived from the terrestrial digital cellular standard GSM (phase 2) and it supports access to GSM core networks.

The GMR release 2 specifications add packet mode services to GMR release 1. The GMR release 2 specifications introduce the GEO-Mobile Packet Radio Service (GMPRS). GMPRS is derived from the terrestrial digital cellular standard GPRS (included in GSM Phase 2+) and it supports access to GSM/GPRS core networks.

Due to the differences between terrestrial and satellite channels, some modifications to the GSM standard are necessary. Some GSM specifications are directly applicable, whereas others are applicable with modifications. Similarly, some GSM specifications do not apply, while some GMR specifications have no corresponding GSM specification.

Since GMR is derived from GSM, the organization of the GMR specifications closely follows that of GSM. The GMR numbers have been designed to correspond to the GSM numbering system. All GMR specifications are allocated a unique GMR number. This GMR number has a different prefix for Release 2 specifications as follows:

- Release 1: GMR-n xx.zyy.
- Release 2: GMPRS-n xx.zyy.

where:

- xx.0yy ($z = 0$) is used for GMR specifications that have a corresponding GSM specification. In this case, the numbers xx and yy correspond to the GSM numbering scheme.
- xx.2yy ($z = 2$) is used for GMR specifications that do not correspond to a GSM specification. In this case, only the number xx corresponds to the GSM numbering scheme and the number yy is allocated by GMR.
- n denotes the first ($n = 1$) or second ($n = 2$) family of GMR specifications.

A GMR system is defined by the combination of a family of GMR specifications and GSM specifications as follows:

- If a GMR specification exists it takes precedence over the corresponding GSM specification (if any). This precedence rule applies to any references in the corresponding GSM specifications.

NOTE: Any references to GSM specifications within the GMR specifications are not subject to this precedence rule. For example, a GMR specification may contain specific references to the corresponding GSM specification.

- If a GMR specification does not exist, the corresponding GSM specification may or may not apply. The applicability of the GSM specifications is defined in GMPRS-1 01.201 [2].

1 Scope

The present document describes abbreviations and acronyms to be used throughout the GMR-1 Release 2 specifications. These abbreviations and acronyms include and extend the abbreviations and acronyms in the corresponding Release 1 specification [1].

All abbreviations are presented in the singular, but are equally applicable to the plural.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

- [1] GMR-1 01.004 (ETSI TS 101 376-1-1): "GEO-Mobile Radio Interface Specifications; Part 1: General specifications; Sub-part 1: Abbreviations and acronyms".

NOTE: This is a reference to a GMR-1 Release 1 specification. See the introduction for more details.

- [2] GMPRS-1 01.201 (ETSI TS 101 376-1-2): "GEO-Mobile Radio Interface Specifications (Release 2) General Packet Radio Service; Part 1: General specifications; Sub-part 2: Introduction to the GMR-1 family".

3 Abbreviations and acronyms

For the purposes of the present document, the following abbreviations and acronyms apply:

A

| | |
|----------|---|
| A3 | Authentication algorithm A3 |
| A38 | A single algorithm performing the functions of A3 & A8 |
| A5/1 | Encryption algorithm A5/1 |
| A5/2 | Encryption algorithm A5/2 |
| A5-GMR-1 | Cipher algorithm A5-GMR-1 (used for ciphering/deciphering data) |
| A5/X | Encryption algorithm A5/0-7 |
| A8 | Ciphering key generating algorithm A8 |
| A-BCCH | Anchor-BCCH |
| AB | Access Burst |
| ABM | Asynchronous Balance Mode |
| ABM | Asymmetric Balance Mode |
| AC | Access Class (C0 to C15) |
| AC | Application Context |
| ACC | Automatic Congestion Control |
| ACC | ACCept |
| ACCH | Associated Control CHannel |
| ACCH/FA | Associated Control CHannel/Full Allocation |
| ACK | ACKnowledgment |
| ACK | ACKnowledge |
| ACM | Accumulated Call Meter |

| | |
|------------|--|
| ACM | Address Complete Message |
| ACU | Antenna Combining Unit |
| ADC | ADministration Center |
| ADC | Analog to Digital Converter |
| ADN | Abbreviated Dialling Number |
| ADPCM | Adaptive Differential Pulse Code Modulation |
| AE | Application Entity |
| AEC | Acoustic Echo Control |
| AEF | Additional Elementary Functions |
| AGCH | Access Grant CHannel |
| Ai | Action indicator |
| ANM | ANswer Message |
| AoC | Advice of Charge |
| AOC | Advanced Operation Center |
| AoCC | Advice of Charge Charging supplementary service |
| AoCI | Advice of Charge Information supplementary service |
| ASE | Application Service Element |
| ASN.1 | Abstract Syntax Notation One |
| ARFCN | Absolute Radio Frequency Channel Number |
| ARQ | Automatic Repeat reQuest |
| ASD | Accelerated Special Density |
| ASFC | Alerting Signaling Failure Counter |
| AT | Access Terminal |
| Ata | Access terminal, country a |
| Atb | Access terminal, country b |
| Atc | Access terminal, country c |
| AT-BSS | Access Terminal-Base Station Subsystem |
| AT-GSS | Access Terminal-Gateway Station Subsystem |
| ATI | Any Time Interrogation |
| ATT (flag) | ATTach |
| AU | Access Unit |
| AuC | Authentication Center |
| AUT(H) | AUThentication |
| AWGN | Additive White Gaussian Noise |

B

| | |
|----------|--|
| BA | BCCH Allocation |
| BACH | Broadcasting Alert CHannel |
| BACH | Broadcast Alerting CHannel |
| BACH | Basic Alerting CHannel |
| BAIC | Barring of All Incoming Calls supplementary service |
| BAOC | Barring of All Outgoing Calls supplementary service |
| BCC | BTS Color Code |
| BCCH | Broadcast Control CHannel |
| BCD | Binary Coded Decimal |
| BCF | Base station Control Function |
| BCIE | Bearer Capability Information Element |
| BCS | Binary Coded Signalling |
| BCS | Block Check Sequence |
| BEC | Backward Error Correction |
| BER | Bit Error Rate |
| BFI | Bad Frame Indication |
| BI | all Barring of Incoming call supplementary services |
| BIC-Roam | Barring of Incoming Calls when Roaming outside the home PLMN Country supplementary service |
| BIIC | Barring of Incoming International Call |
| Bm | Full-rate traffic channel |
| BN | Bit Number |
| BO | all Barring of Outgoing call supplementary services |
| BOIC | Barring of Outgoing International Calls supplementary service |

| | |
|------------|--|
| BOIC-exHC | Barring of Outgoing International Calls except those directed to the Home PLMN Country supplementary service |
| BS | Bearer Services |
| BS | Base Station |
| BS | Basic Service (group) |
| BSC | Base Station Controller |
| BSG | Basic Service Group |
| BSIC | Base transceiver Station Identity Code |
| BSIC-NCELL | BSIC of an adjacent cell |
| BSN | Block Sequence Number |
| BSS | Base Station System |
| BSSAP | Base Station System Application Part |
| BSSMAP | Base Station Subsystem Management Application Part |
| BSSOMAP | Base Station System Operation and Maintenance Application Part |
| BTS | Base Transceiver Station |

C

| | |
|--------|---|
| C | Conditional |
| CA | Cell Allocation |
| CAI | Common Air Interface |
| CAI | Charge Advice Information |
| CB | Call Barring |
| CBC | Cell Broadcast Center |
| CBCH | Cell Broadcast CHannel |
| CBCH | Call Broadcast CHannel |
| CBF | Control Block Follows |
| CBMI | Cell Broadcast Message Identifier |
| CC | Country Code |
| CC | Circuit-switched Calls |
| CC | Call Control |
| CC/NDC | Country Code/Network Destination Code |
| CCBS | Completion of Calls to Busy Subscriber supplementary service |
| CCCH | Common Control CHannel |
| CCF | Conditional Call Forwarding |
| CCH | Control CHannel |
| CCM | Current Call Meter |
| CCP | Capability/Configuration Parameter |
| CCPE | Control Channel Protocol Entity |
| CCS7 | CCITT Signalling System No. 7 |
| Cct | Circuit |
| CDR | Call Data Record |
| CDUR | Chargeable DURation |
| CED | Called station identifier |
| CEIR | Central Equipment Identity Register |
| CEND | END of charge point |
| CEPT | Conférence des administrations Européennes des Postes et Telecommunications |
| CF | Conversion Facility |
| CF | all Call Forwarding services |
| CF | Control Flag |
| CFB | Call Forwarding on mobile subscriber Busy supplementary service |
| CFNRc | Call Forwarding on mobile subscriber Not Reachable supplementary service |
| CFNRy | Call Forwarding on mobile subscriber No Reply supplementary service |
| CFU | Call Forwarding Unconditional supplementary service |
| CGI | Cell Group Identifier |
| CGI | Cell Global Identification |
| CHP | CHarging Point |
| CHV | Card Holder Verification |
| C/I | Carrier-to-Interference |
| CI | Cell Identity |
| CI | CUG Index |
| CICH | Common Idle CHannel |

| | |
|---------|--|
| CIP | Call In Progress |
| CIR | Channel Interference Ratio |
| CKSN | Ciphering Key Sequence Number |
| CLI | Calling Line Identity |
| CLIP | Calling Line Identification Presentation supplementary service |
| CLIR | Calling Line Identification Restriction supplementary service |
| CM | Connection Management |
| CMD | CoMmanD |
| CMM | Channel Mode Modify |
| CNG | CalliNG tone |
| CNG | Comfort Noise Generation |
| COLI | COnnected Line Identity |
| COLP | COnnected Line identification Presentation supplementary service |
| COLR | COnnected Line identification Restriction supplementary service |
| COM | COMplete |
| COMP | COMplete |
| CONN | CONNect |
| CONNACK | CONNect ACKnowledgment |
| CPI | Current Position Indicator |
| CQPSK | Coherent Quadrature Phase-Shift Keying |
| CR | Channel Request |
| C/R | Command/Response bit |
| C/R | Command/Response field bit |
| CRC | Cyclic Redundancy Check |
| CRE | Call RE-establishment procedure |
| CS | Coding Scheme |
| CSN | Compact Syntax Notation |
| CSN | Check Sum Number |
| CSPDN | Circuit Switched Public Data Network |
| CT | Call Transfer supplementary service |
| CT | Channel Tester |
| CT | Channel Type |
| CTR | Common Technical Regulation |
| CU | Channel Unit |
| CUG | Closed User Group |
| CUG | Closed User Group supplementary service |
| CW | Call Waiting |
| CW | Call Waiting supplementary service) |

D

| | |
|----------|--|
| DAC | Digital to Analogue Converter |
| dB | deciBel |
| DB | Dummy Burst |
| DC2 | two-slot Downlink Control |
| DC6 | six-slot Downlink Control |
| DCCH | Dedicated Control CHannel |
| DCE | Data Circuit terminating Equipment |
| DCF | Data Communication Function |
| DCN | Data Communication Network |
| DCS1 800 | Digital Cellular System at 1 800 MHz |
| DET | DETAch |
| DISC | DISConnect |
| DKAB | Dual Keep-Alive-Burst |
| DL | Data Link |
| DL | Data Link layer |
| DLCI | Data Link Connection Identifier |
| DLD | Data Link Discriminator |
| Dm | Control Channel (ISDN terminology applied to mobile service) |
| DM | Disconnect Mode |
| DMHT | Dual Mode Hold Timer |
| DMR | Digital Mobile Radio |

| | |
|------|---------------------------------------|
| DNIC | Digital Network Identifier Control |
| DP | Dial (or Dialed Pulse) |
| DRX | Discontinuous Reception |
| DRX | Discontinuous Reception mechanism |
| DSE | Data Switch Exchange |
| DSI | Digital Speech Interpolation |
| DSS1 | Digital Subscriber Signaling no. 1 |
| DTAP | Direct Transfer Application Part |
| DTE | Data Terminal Equipment |
| DTMF | Dual Tone MultiFrequency |
| DTMF | Dual Tone MultiFrequency signaling |
| DTX | Discontinuous Transmission |
| DTX | Discontinuous Transmission mechanism) |

E

| | |
|-------|--|
| EA | External Alarms |
| EA | Extended Address |
| EBSG | Elementary Basic Service Group |
| Ec/No | Ratio of Energy per modulating bit to the Noise spectral density |
| ECM | Error Correction Mode (facsimile) |
| ECT | Explicit Call Transfer supplementary service |
| EEL | Electronic Echo Loss |
| EIA | Electronics Industries Association |
| EIR | Equipment Identity Register |
| EIRP | Effective Isotropic Radiated Power |
| EL | Echo Loss |
| EMC | ElectroMagnetic Compatibility |
| eMLPP | enhanced Multi-Level Precedence and Pre-emption service |
| EMMI | Electrical Man Machine Interface |
| EPROM | Erasable Programmable Read Only Memory |
| ERP | Ear Reference Point |
| ERP | Equivalent Radiated Power |
| ERR | ERRor |
| EST | European Standard Telecommunications |
| ETR | ETSI Technical Report |
| ETS | European Telecommunication Standard |
| ETSI | European Telecommunications Standards Institute |

F

| | |
|---------|---|
| FA | Full Allocation |
| | Fax Adapter |
| FA/IWF | Fax Adaptor located at IWF side |
| FA/MT | Fax Adaptor integrated with the MT |
| FAC | Final Assembly Code |
| FACCH | Fast-Associated Control CHannel |
| FACCH | Fast Access Control CHannel |
| FACCH/F | Fast Associated Control CHannel/Full rate |
| FACCH/H | Fast Associated Control CHannel/Half rate |
| FACCHN | Fast Access Control CHAnnel |
| FAI | Final Acknowledgement Indicator |
| FB | Frequency correction Burst |
| FBI | Final Block Indicator |
| FC | Frequency Correction |
| FCCH | Frequency Correction CHannel |
| FCCH | Frequency Control CHannel |
| FC | Frequency Correction |
| FCS | Frame Check Sequence |
| FDM | Frequency Division Multiplexing |
| FDN | Fixed Dialing Number |
| FEC | Forward Error Correction |
| FER | Frame Erasure Ratio |

| | |
|-----|---------------------|
| FER | Frame Error Rate |
| FH | Frequency Hopping |
| FN | Frame Number |
| FR | Full Rate |
| FT | Fixed Terminal |
| ftn | forwarded-to number |

G

| | |
|----------|---|
| GBCH | GPS Broadcast CHannel |
| GCI | GPS Capability Indicator |
| GCR | Group Call Register |
| GEM™ | GeoMobile (satellite system) |
| GEO | Geostationary Earth Orbit |
| GF | Galois Field |
| GGSN | Gateway GPRS Support Node |
| GMM | GPRS Mobility Management |
| GMPRS | GEO-Mobile Packet Radio Service |
| GMR | GEO-Mobile Radio interface |
| GMR-1 | GEO-Mobile Radio interface - family 1 |
| GMSC | Gateway Mobile-service Switching Center |
| GMSK | Gaussian Minimum Shift Keying (modulation) |
| GP | Global Positioning |
| GPA | GSM PLMN Area |
| GPRS | General Packet Radio Service |
| GPS | Global Positioning System |
| GREJ | Group REJect |
| GS | Gateway Station |
| Gsa | Gateway Station a |
| GSA | GSM System Area |
| GSb | Gateway Station b |
| GSc | Gateway Station c |
| GS(o) | Ground Station, originating |
| GS(t) | Ground Station, terminating |
| GSC | Gateway Station Controller (network element) |
| GSC | GMR-1 Security Custodian (used in security schemes) |
| GSM | Global System for Mobile communications |
| GSM MES | GSM Mobile Earth Station |
| GSM PLMN | GSM Public Land Mobile Network |
| GSS-MSC | Gateway Station Subsystem-Mobile Switching Center |
| GSTN | General Switched Telephone Network |
| GtT | Gateway-to-Terminal call |
| GT | Global Title |
| G/T | Gain/Temperature |
| GTS | Gateway Transceiver Station |

H

| | |
|-------|---------------------------------|
| HANDO | HANDOver |
| HDLC | High-level Data Link Control |
| HHT | HandHeld Terminal |
| HLC | High Layer Compatibility |
| HLR | Home Location Register |
| HNS | Hughes Network Systems |
| HPA | High-Penetration Alerting |
| HPLMN | Home Public Land Mobile Network |
| HPU | Hand Portable Unit |
| HR | Half Rate |
| HSN | Half-Symbol Number |
| HSN | Hopping Sequence Number |
| HSP | Home Service Provider |
| HU | Home Units |
| Hz | Hertz |

I

| | |
|----------|---|
| I | Information frames (RLP) |
| IA | Incoming Access (closed user group SS) |
| IAM | Initial Address Message |
| IAR | Immediate Assignment Reject |
| IAR | Immediate Assignment Request |
| IC | Interlock Code (CUG SS) |
| ICB | Incoming Calls Barred (within the CUG) |
| IC(pref) | Interlock Code of the preferential CUG |
| ICC | Integrated Circuit(s) Card |
| ICM | In-Call Modification |
| ID | IDentification |
| IDN | Integrated Digital Network |
| IE | Information Element |
| IEC | International Electrotechnical Commission |
| IEEE | Institute of Electrical and Electronics Engineers |
| IEI | Information Element Identifier |
| IMEI | International Mobile Equipment Identity |
| IMM | IMMediate assignment message |
| IMSI | International Mobile Subscriber Identity |
| IN | Interrogating Node |
| INCS | IntraNetwork Communication Subsystem |
| ISC | International Switching Center |
| ISDN | Integrated Services Digital Network |
| ISO | International Standards Organization |
| ISUP | ISDN User Part (of signaling system No. 7) |
| ITC | Information Transfer Capability |
| ITR | Immediate Termination Request |
| ITU | International Telecommunication Union |
| IWF | InterWorking Function |
| IWMSC | InterWorking MSC |
| IWU | InterWorking Unit |

K

| | |
|----------|---|
| k | Windows size |
| K | Constraint length of the convolutional code |
| KAB | Keep-Alive Burst |
| Kbps | Kilo bits per second |
| Kc | Ciphering Key |
| Kc[M] | Message encrypted with ciphering key Kc |
| Kc[TMSI] | TMSI encrypted with ciphering key Kc |
| KEYNR | KEY NumbeR associated with a session key |
| KHz | KiloHertz |
| Ki | Individual subscriber authentication Key |

L

| | |
|---------|--|
| L1 | Layer 1 |
| L2ML | Layer 2 Management Link |
| L2R | Layer 2 Relay |
| L2R BOP | L2R Bit Orientated Protocol |
| L2R COP | L2R Character Orientated Protocol |
| L3 | Layer 3 |
| LA | Location Area |
| LAC | Location Area Code |
| LAI | Location Area Identification |
| LAN | Local Area Network |
| LAP | Link Access Procedure |
| LAPB | Link Access Protocol Balanced |
| LAPD | Link Access Protocol for D channel |
| LAPDm | Link Access Protocol on the Dm channel |

| | |
|--------|---|
| LCN | Local Communication Network |
| LE | Local Exchange |
| LFI | Length Field Indicator |
| LI | Length Indicator |
| LLC | Low Layer Compatibility |
| LLC | Logical Link Control |
| Lm | traffic channel with capacity Lower than a Bm |
| LMSI | Local Mobile Station Identity |
| LMSS | Land Mobile Satellite Service |
| LND | Last Number Dialed |
| LO | Last Octet |
| LOBITS | Low Order Bits |
| LOC | LOCation |
| LoS | Line of Sight |
| LPD | Link Protocol Discriminator |
| LPLMN | Local PLMN |
| LPS | Last Part Size |
| LQI | Link Quality Indication |
| LR | Location Register |
| LR | Location Registration |
| lsb | least significant bit |
| LSTR | Listener Side Tone Rating |
| LTE | Local Terminal Emulator |
| LU | Location Update |
| LV | Length and Value |

M

| | |
|---------|---|
| M | Mandatory |
| M | clear text Message |
| MA | Mobile Allocation |
| MAC | Medium Access Control |
| MACN | Mobile Allocation Channel Number |
| MAF | Mobile Additional Function |
| MAH | Mobile Access Hunting supplementary service |
| MAI | Mobile Allocation Index |
| MAIO | Mobile Allocation Index Offset |
| MAP | Mobile Application Part |
| MCC | Mobile Country Code |
| MCI | Malicious Call Identification supplementary service |
| MCS | Modulation and Coding Scheme |
| MD | Mediation Device |
| MDL | (mobile) Management (entity) - Data Link (layer) |
| ME | Mobile Equipment |
| MEF | Maintenance Entity Function |
| MES | Mobile Earth Station |
| MESa | Mobile Earth Station, country a |
| MESb | Mobile Earth Station, country b |
| MES-BSS | Mobile Earth Station-Base Station Subsystem |
| MESc | Mobile Earth Station, country c |
| MES-GSS | Mobile Earth Station-Gateway Station Subsystem |
| MES-ME | Mobile Earth Station-Mobile Equipment |
| MES-MS | Mobile Earth Station-Mobile Station |
| MF | Multi Frame |
| MHS | Message Handling System |
| MHz | MegaHertz |
| MIC | Mobile Interface Controller |
| MII | Mobile Identity Indicator |
| MM | Mobility Management |
| MM | Mobility Management layer |
| MME | Mobile Management Entity |
| MMI | Man-Machine Interface |

| | |
|--------|---|
| MNC | Mobile Network Code |
| MO | Mobile Originated |
| MOD | MODify |
| MoU | Memorandum of Understanding |
| MPH | (mobile) Management (entity) – PHysical (layer) [primitive] |
| MPTY | MultiParTY (Multi ParTY) supplementary service |
| MRP | Mouth Reference Point |
| MS | Mobile Station |
| msb | most significant bit |
| MS-BSS | Mobile Station – Base Station System |
| MSC | Mobile Switching Center |
| MSCID | MSC Identity |
| MSCM | Mobile Station Class Mark |
| MSC(o) | MSC within originating GS |
| MSC(t) | MSC within terminating GS |
| MSCU | Mobile Station Control Unit |
| msec | Millisecond |
| MSG | MeSsaGe phase of fax transmission per CCITT T.30 |
| MSISDN | Mobile Station International iSDn Number |
| MSRN | Mobile Station Roaming Number |
| MSS | Mobile Satellite Service |
| MT | Mobile Terminated |
| MTGMR | Mobile Terminal for GMR |
| MTGMR | Mobile Terminated (subscriber GMR) |
| MTM | Mobile-to-Mobile (call) |
| MTP | Message Transfer Part |
| MTP | Message TransPort layer |
| MU | Mark Up |
| MUMS | Multi User Mobile Station |

N

| | |
|-------|---|
| N(R) | Receiver sequence Number |
| N(S) | Send sequence Number |
| NA | Not Available |
| NB | Normal Burst |
| NCC | Network (PLMN) Color Code |
| NCH | Notification CHannel |
| NDC | National Destination Code |
| NDUB | Network Determined User Busy |
| NE | Network Element |
| NEF | Network Element Function |
| NF | Network Function |
| NIC | Network Independent Clocking |
| NM | Network Management |
| NMC | Network Management Center |
| NMSI | National Mobile Station Identification number |
| NPI | Numbering Plan Indicator |
| NSS | Network Switching Subsystem |
| NSAP | Network Service Access Point |
| NSS | Network Switching Subsystem |
| NT | Network Termination |
| NT | Non Transparent |
| NT3 | three-slot Normal Traffic |
| NT6 | six-slot Normal Traffic |
| NT9 | nine-slot Normal Traffic |
| NTAAB | New Type Approval Advisory Board |
| NTN | Network Terminal Number |
| NUA | Network User Access |
| NUI | Network User Identification |
| NUP | National User Part (SS7) |

O

| | |
|--------|-------------------------------------|
| O | Optional |
| O&M | Operations & Maintenance |
| OA | Outgoing Access (CUG SS) |
| OACSU | Off-Air Call Set-Up |
| OCB | Outgoing Call Barred within the CUG |
| OLR | Overall Loudness Rating |
| OMC | Operations and Maintenance Center |
| OML | Operations and Maintenance Link |
| OR | Optimal Routing |
| OS | Operating System |
| OSI | Open System Interconnect |
| OSI RM | OSI Reference Model |
| OSS | Operation(s) Support System |

P

| | |
|----------|---|
| PAB | Packet Access Burst |
| PABX | Private Automatic Branch eXchange |
| PACCH | Packet Associate Control CHannel |
| PAD | Packet Assembly/Disassembly |
| PAGCH | Packet Access Grant CHannel |
| PAN | Power Attenuation Notification |
| PAR | Power Attenuation Request |
| PAS | Power Attenuation Setting |
| PBCCH | Packet Broadcast Control CHannel |
| PC | Personal Computer |
| PC | Physical Channel |
| PC2d | Physical Channel (2d) |
| PC6d | Physical Channel (6d) |
| PC12u | Physical Channel (12u) |
| PCCCH | Packet Common Control CHannel |
| PCH | Paging CHannel |
| PCM | Pulse Code Modulation |
| PCRTN | Physical-Channel-Relative Timeslot Number |
| PD | Protocol Discriminator |
| PD | Public Data |
| PDCH | Packet Data CHannel |
| PDN | Public Data Network |
| PDR | Preliminary Design Review |
| PDTCH | Packet Data Traffic CHannel |
| PDU | Protocol Data Unit |
| P/F | Poll/Final |
| P/F | Poll and Final bit |
| PH | Packet Handler |
| PH | PHysical (layer) |
| PHI | Packet Handler Interface |
| PHY | PHYSical layer |
| PI | Presentation Indicator |
| PI | Pre-correction Indication |
| PICS | Protocol Implementation Conformance Statement |
| PIN | Personal Identification Number |
| PKAB | Packet Keep-Alive Burst |
| PLMN | Public Land Mobile Network(s) |
| PNB | Packet Normal Burst |
| PNE | Présentation des Normes Européennes |
| POI | Point Of Interconnection (with PSTN) |
| PP | Point-to-Point |
| PPCH | Packet Paging CHannel |
| PPE | Primitive Procedure Entity |
| PRACH | Packet Random Access CHannel |
| Pref CUG | Preferential CUG |

| | |
|---------|--|
| PRN | Provide Roaming Number |
| PROC | PROCeeding |
| PROG | PROGram |
| PRI | PRivate Information |
| Ps | location Probability |
| PSFC | Paging Signaling Failure Counter |
| PSI | Packet System Information |
| PSPDN | Packet Switched Public Data Network |
| PSTN | Public Switched Telephone Network |
| PTCCH | Packet Timing Advance Control CHannel |
| PTCCH/D | Packet Timing advance Control CHannel/Downlink |
| PTCCH/U | Packet Timing advance Control CHannel/Uplink |
| PUCT | Price per Unit Currency Table |
| PUI | PUBlic Information |
| PW | PassWord |

Q

| | |
|-----|-------------------------|
| QA | Q (interface) – Adapter |
| QAF | Q-Adapter Function |
| QoS | Quality of Service |

R

| | |
|---------|---|
| R | Value of Reduction of the MS transmitted RF power relative to the maximum allowed output power of the highest power class of MS (A) |
| RA | Roaming Agreements |
| RA | Registration Area |
| RAB | Random Access Burst |
| RACH | Random Access CHannel |
| RAI | Routing Area Indicator |
| RAND | RANdOm number (used for authentication) |
| RBB | Received Block Bitmap |
| RBER | Residual Bit Error Ratio |
| RDI | Restricted Digital Information |
| REC | RECommendation |
| REJ | REJect(ion) |
| REL | RELease |
| REQ | REQuest |
| RF | Radio Frequency |
| RFC | Radio Frequency Channel |
| RFCH | Radio Frequency Channel |
| RFN | Reduced TDMA Frame Number |
| RFU | Reserved for Future Use |
| RLC | Radio Link Control |
| RLP | Radio Link Protocol |
| RLR | Receiver Loudness Rating |
| RMS | Root Mean Square (value) |
| RNR | Receiver Not Ready |
| RNTABLE | TABLE of 128 integers in the hopping sequence |
| RPLMN | Registered PLMN |
| RPOA | Recognized Private Operating Agency |
| RR | Radio Resource |
| RR | Receive Ready |
| RS | Reed-Solomon |
| RSE | Radio System Entity |
| RSL | Radio Signaling Link |
| RSS | Received Signal Strength |
| RSSI | Received Signal Strength Indication |
| RSZI | Regional Subscription Zone Identity |
| RTE | Remote Terminal Emulator |
| Rx | Receiver |
| RXLEV | Receiver signal LEVel |

RXQUAL Receiver signal QUALity

S

S Supervisor (function bit)
 Sa Subscriber country a
 SABM Set Asynchronous Balance Mode
 SACCH Satellite Access Control CHannel
 SACCH Slow Associated Control CHannel
 SACCH Slow Access Control CHannel
 SACCH/C4 Slow Associated Control CHannel/Channel 4
 SACCH/C8 Slow Associated Control CHannel/Channel 8
 SACCH/T Slow Associated Control CHannel/Traffic channel
 SACCH/TF Slow Associated Control CHannel/Traffic channel Full rate
 SACCH/TH Slow Associated Control CHannel/Traffic channel Half rate
 SAP Service Access Point
 SAPI Service Access Point Identifier
 Sat Satellite
 Sb Subscriber country b
 SB Synchronization Burst
 SBID Spot Beam Identity
 Sc Subscriber country c
 SC Service Center (used for SMS)
 SC Service Code
 SCCP Signaling Connection Control Part
 SCH Synchronization CHannel
 SCN SubChannel Number
 SCP Service Control Point
 SDCCH Standalone Dedicated Control CHannel
 SDD System Design Document
 SDD Software Design Document
 SDL Specification Description Language
 SDT SDL Development Tool
 SDU Service Data Unit
 SE Support Entity
 SEF Support Entity Function
 SFH Slow Frequency Hopping
 SGSN Serving GPRS Support Node
 SI System Information
 SI Screening Indicator
 SI Service Interworking
 SI Supplementary Information
 SIA Supplementary Information A
 SID Silence Descriptor
 SIM Subscriber Identity Module
 SIRFN System-Information-Relative Frame Number
 SLR Send Loudness Rating
 SLTM Signaling Link Test Message
 SME Short Message Entity
 SMG Special Mobile Group
 SMS Short Message Service
 SMSCB Short Message Service Cell Broadcast
 SMS-SC Short Message Service-Service Center
 SMS/PP Short Message Service/Point-to-Point
 Smt Short message terminal
 SN Subscriber Number
 SNDC SubNetwork Dependent Convergence
 SNDCP SubNetwork Dependent Convergence Protocol
 SNR Serial Number
 SOA Suppress Outgoing Access (CUG SS)
 SOR Support of Optimal Routing
 SP Service Provider

| | |
|------|--------------------------------------|
| SP | Signalling Point |
| SP | SPare |
| SPC | Signaling Point Code |
| SPC | Suppress Preferential CUG |
| SQI | Signal Quality Indicator |
| SQM | Signal Quality Measurement |
| SQT | Signal Quality Target |
| SRES | Signed RESponse (authentication) |
| SRH | SB_Reselect_Hysteresis |
| SRI | Send Routing Information |
| SS | Supplementary Service |
| SS | System Simulator |
| SS7 | Signaling System 7 |
| SSC | Supplementary Service Control string |
| SSN | SubSystem Number |
| SSP | Service Switching Point |
| SST | SACCH Status biT |
| STMR | Side Tone Masking Rating |
| STP | Signaling Transfer Point |
| SVN | Software Version Number |
| S/W | SoftWare |

T

| | |
|----------|---|
| T | Timer |
| T | Transparent |
| T | Type only |
| T-BCCH | Temporary-BCCH |
| TA | Terminal Adapter |
| TA | Timing Advance |
| TAC | Type Approval Code |
| TACCH | Terminal-to-terminal Associated Control CHannel |
| TAF | Terminal Adaptation Function |
| TAI | Timing Advance Index |
| TBF | Temporary Block Flow |
| TBR | Technical Basis for Regulation |
| TC | Transaction Capabilities |
| TC | Timing Correction |
| TC-TR | Technical Committee-Technical Report |
| TCH | Traffic Channel |
| TCH3 | Traffic CHannel for speech |
| TCH6 | Traffic CHannel for-4,8 kbps user data |
| TCH9 | Traffic CHannel for-9,6 kbps user data |
| TCH/F | Traffic CHannel for Full rate |
| TCH/F2,4 | Traffic CHannel for Full rate data ($\leq 2,4$ kbps) |
| TCH/F4,8 | Traffic CHannel for Full rate data (4,8 kbps) |
| TCH/F9,6 | Traffic CHannel for Full rate data (9,6 kbps) |
| TCH/FS | Traffic CHannel for Full rate Speech |
| TCH/H | Traffic CHannel for Half rate |
| TCH/HS | Traffic CHannel for Half rate Speech |
| TCH/H2,4 | Traffic CHannel for Half rate data ($\leq 2,4$ kbps) |
| TCH/H4,8 | Traffic CHannel for Half rate data (4,8 kbps) |
| TCHN | Traffic CHannel Network |
| TCI | Transceiver Control Interface |
| TCS | Traffic Control Subsystem |
| TCS(o) | TCS within originating ground station |
| TCS(t) | TCS within terminating ground station |
| TDMA | Time Division Multiple Access |
| TE | Terminal Equipment |
| Tei | Terminal endpoint identifier |
| TFA | TransFer Allowed |
| TFI | Temporary Flow Identifier |

| | |
|------------------|---|
| TFI | Temporary Frame Identity |
| TFP | TransFer Prohibited |
| T _{HPA} | Timer (High Penetration Alerting) |
| TI | Transaction Identifier |
| TLLI | Temporary Logical Link Identity |
| TLV | Type, Length and Value |
| TMN | Telecommunications Management Network |
| TMSI | Temporary Mobile Subscriber Identity |
| TMSI o/n | Temporary Mobile Subscriber Identity old/new |
| TN | Timeslot Number |
| TON | Type Of Number |
| TRX | Transceiver |
| TS | TimeSlot |
| TS | Technical Specification |
| TS | TeleService |
| TSC | Training Sequence Code |
| TSDI | Transceiver Speech & Data Interface |
| TSP | Target Service Provider |
| TTCH | Terminal-to-Terminal CHannel |
| TTCN | Tree and Tabular Combined Notation |
| TTF | Time To First Fix |
| TtG | Terminal-to-Gateway |
| TTID | Temporary Terminal IDentification |
| TtT | Terminal-to-Terminal |
| TUP | Telephone User Part (SS7) |
| TV | Type and Value |
| Tx | Transmit |
| Tx | Transmitter |
| TXPWR | Transmit PoWeR TX power level in the MS_TXPWR_REQUEST and MS_TXPWR_CONF parameters |

U

| | |
|-------|---|
| U | Unnumbered (function bit) |
| UA | Unnumbered Acknowledgment |
| UD | Unsatisfied Demand |
| UDI | Unrestricted Digital Information |
| UDUB | User Determined User Busy |
| UFN | Uplink Frame Number |
| UI | Unnumbered Information (frame) |
| UIC | Union Internationale des Chemins de fer |
| ULQR | UpLink Quality Report |
| UPCMI | Uniform PCM Interface (13-bit) |
| UPD | UP to Date |
| USF | Uplink State Flag |
| USSD | Unstructured SS Data |
| UT | User Terminal |
| UTC | Universal Time Code |
| UTC | Universal Time Co-ordinate(s) |
| UTC | UT terminated Call |
| UUS | User-to-User Signalling supplementary service |
| UW | Unique Word |

V

| | |
|-------|----------------------------|
| V | Value only |
| V(A) | Acknowledge state Variable |
| V(R) | Receive state Variable |
| V(S) | Send state Variable |
| V(SD) | SenD state Variable |
| VAD | Voice Activity Detection |
| VAP | Videotex Access Point |
| VBS | Voice Broadcast Service |

| | |
|----------|--|
| VGCS | Voice Group Call Service |
| VLR | Visitor Location Register |
| VLR o/n | Visitor Location Register old/new |
| VMSC | Visited Mobile Switching Center |
| VPLMN | Visited PLMN |
| VPLMN | Visited Public Land Mobile Network |
| VSC | Videotex Service Center |
| VSP | Visiting Service Provider |
| VT | Vehicular Terminal |
| VTX host | The components dedicated to Videotex service |

W

| | |
|-----|-----------------------------------|
| WS | Work Station |
| WPA | Wrong Password Attempts (counter) |

X

| | |
|-----|---------------------|
| XID | eXchange IDentifier |
|-----|---------------------|

Z

| | |
|----|-----------|
| ZC | Zone Code |
|----|-----------|

History

| Document history | | |
|-------------------------|------------|-------------|
| V2.1.1 | March 2005 | Publication |
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